REMARKS

This Amendment responds to the Office Action dated November 15, 2010 in which the Examiner rejected claims 1-36 under 35 U.S.C. § 103.

As indicated above, claims 1, 19 and 36 have been amended in order to make explicit what is implicit in the claims. The amendment is unrelated to a statutory requirement for patentability. Claims 18 and 35 have been amended to correspond to the amendments made to the independent claims. The amendments are unrelated to a statutory requirement for patentability and do not narrow the literal scope of the claims.

Claim 1 claims a dialog control device, claim 19 claims a dialog control method and claim 36 claims a robot. The device, method and robot customize dialog between a user and a robot. A memory stores various pieces of information, appended to an object, as values corresponding to respective items of the object. The memory also stores a degree of impression relative to the value. The degree of impression indicates whether the item is used in future conversations. The various pieces of information are acquired by the robot and based on a voice recognition process and visual recognition of a user. A conversation generating means selects, in response to an item about the object defined as a topic about the user, another topic about the user relating to the topic used in the immediately preceding conversation. The conversation generating means generates at least one of (1) an acquisition conversation and (2) a utilization conversation. The acquisition conversation acquires the value of the item, selected as the topic, from the user. The utilization conversation utilizes the value of the item, in the topic already stored in the memory, as the next conversation based on the degree of impression such that a frequency of a utilized item is varied. The conversation generating means is adapted to store the acquired information, acquired in the acquisition conversation, as the value of the corresponding

item. The dialog control device makes a conversation with the user that is customized for the user.

By storing various pieces of information and a degree of impression relative to a value such that the degree of impression indicates whether the item is used in future conversations and by generating at least one of an acquisition conversation and a utilization conversation where the utilization conversation utilizes the value of the item in the topic, already stored, as the next conversation based on the degree of impression such that a frequency of a utilized item is varied, as claimed in claims 1, 19 and 36, the claimed invention provides a dialog control device, method and robot which has a conversation with a user that is customized for the user. The prior art does not show, teach or suggest the invention as claimed in claims 1, 19 and 36.

Claims 1-36 were rejected under 35 U.S.C. § 103 as being unpatentable over *Fukui, et al.* (U.S. Patent No. 5,918,222) in view of *Tumey, et al.* (U.S. Patent No. 7,062,073) and further in view of *Freeman* (U.S. Patent No. 5,340,317).

Fukui, et al. appears to disclose an information provider model having topics (see Figure 94) (column 46, lines 15-16). An agent retrieves user information (column 46, line 30). When the information provider and user are more intimate, the number of shared topics is large and the degree of details increases (column 46, lines 37-39). Disclosure information is managed in a tree structure (column 46, lines 49-50). In the following conversation, check 1 corresponds to a change in topic. In this case, reliability of the user for the agent is lost. The change in topic may be performed using, for example, a topic as the third candidate of all answer candidates prepared in the interactive operation f times before the current interaction operation (column 52, lines 19-25). The names of emotion actually found in a request task are assigned in the regions on the

three axes as shown in Figure 177. The emotional regions may overlap each other (column 86, lines 11-13).

Thus, *Fukui, et al.* merely discloses storing information in a tree structure and using user emotions. Nothing in *Fukui, et al.* shows, teaches or suggests (a) storing a degree of impression relative to a value of an item such that the degree of impression indicates whether the item is used in future conversations and (b) utilizing a value of the item in the topic as the next conversation based on the degree of impression such that the frequency of a utilized item is varied as claimed in claims 1, 19 and 36. Rather, *Fukui, et al.* only discloses storing information in a tree structure and determining the emotions of a user.

Tumey, et al. appears to disclose an interactive entertainment apparatus which responds to other types of biometric characteristics of a person in its proximity such as fingerprint characteristics or some other type of biometric characteristic. The acquisition of the representation of a facial characteristic is preferably performed by an acquisition device (column 3, lines 36-42).

Thus, *Tumey, et al.* only discloses acquiring facial characteristics. Nothing in *Tumey, et al.* shows, teaches or suggests (a) storing a degree of impression relative to a value such that the degree of impression indicates whether the item is used in future conversations and (b) utilizing the value of an item as the next conversation based on the degree of impression such that the frequency of a utilized item is varied as claimed in claims 1, 19 and 36. Rather, *Tumey, et al.* only discloses using biometric characteristics of a person such as facial characteristics.

Freeman appears to disclose multiple choice input may be provided by any appropriate device to select a channel of the conversation for output. If a microprocessor and computer were in use, the multiple choice inputs could be provided via a keyboard or even a touch screen that

interrupts to the processor (column 7, lines 9-14). The various information segments on the various tracks related in real-time to content so that an interactive conversation can occur as the media is played back and the child responds to the various interrogatories on the tracks (column 7, lines 48-52). Example 6 question, "Thank you very much for turning me on. I am your toy robot 2-XL, and this program is called fun and games. It will be my job to provide questions and games. It will be your job to have fun. As usual, please follow my instructions carefully. Only press the buttons I tell you to press and only after I say the word NOW. Before we begin, I would like to know if you are a girl or a boy. If you are a girl, press A. If you are a boy, press B. Please press A or B NOW" (column 23).

Thus, *Freeman* merely discloses pressing buttons in order to have a child respond to questions. Nothing in *Freeman* shows, teaches or suggests (a) storing a degree of impression relative to a value such that the degree of impression indicates whether the item is used in future conversations and (b) utilizing the value of the item as the next conversation based on the degree of impression such that the frequency of a utilized item is varied as claimed in claims 1, 19 and 36. Rather, *Freeman* only discloses that when the child is instructed to press buttons to respond to the questions.

The combination of *Fukui, et al.*, *Tumey, et al.* and *Freeman* would merely suggest to classified pieces of information based on a tree structure and to determine a user's emotion as taught by *Fukui, et al.,* to use biometric characteristics such as facial characteristics as taught by *Tumey, et al.* and to press buttons in order to have a child respond to questions as taught by *Freeman.* Thus, nothing in the combination of the references shows, teaches or suggests (a) storing a degree of impression relative to a value such that the degree of impression indicates whether the item is used in future conversations and (b) utilizing the value of the item in a next

conversation based on the degree of impression such that the frequency of a utilized item is varied as claimed in claims 1, 19 and 36. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 1, 19 and 36 under 35 U.S.C. § 103.

Claims 2-17 and 20-34 depend from claims 1 and 19 and recite additional features. Applicants respectfully submit that claims 2-17 and 20-34 would not have been obvious within the meaning of 35 U.S.C. § 103 over *Fukui, et al.*, *Tumey, et al.* and *Freeman* at least for the reasons as set forth above. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 2-17 and 19-34 under 35 U.S.C. § 103.

Thus, it now appears that the application is in condition for a reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

CONCLUSION

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 50-0320.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 50-0320.

Respectfully submitted,

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By: _____

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